

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A solid fertilizer composition comprising: a granular admixture of Leonardite humate and a phosphate source, selected from natural rock phosphate, monoammonium phosphate, diammonium phosphate, single superphosphates or triple superphosphates used singularly or in combination, which has been pressed together in a granular form, wherein the concentration of said humate is equal to or greater than 5% by weight of the final composition and the concentration of said phosphate source is equal to or greater than 5% by weight of the final composition, the balance being selected from the group consisting of binders, inoculants, plant nutrient sources, microorganism nutrient sources, iron, phosphate-solubilizing agents, chelating agents, and combinations thereof, wherein the admixture is maintained at or below 100 degrees C during manufacture.

2. (Original) A solid fertilizer composition of claim 1, further comprising a moisture barrier agent coated on said granular admixture.

3.-6. (Cancelled)

7. (Currently Amended) The fertilizer composition of claim 1 or 2, 3, 4, 5 or 6, wherein said phosphate source is natural rock phosphate.

8. (Currently Amended) The fertilizer composition of claim 7, wherein said Leonardite humate and natural rock phosphate are combined in a ratio within the range of from 1:1 to 5:1 by weight.

9. (Currently Amended) The fertilizer composition of claim 1 or 2, 3, 4, 5 or 6, wherein said phosphate source is monoammonium phosphate.

10. (Currently Amended) The fertilizer composition of claim 9, wherein said Leonardite humate and monoammonium phosphate are combined in a ratio within the range of 3:1 to 2:1 by weight.

11.-18. (Cancelled)

19. (Currently Amended) A solid fertilizer composition comprising 70.95% Leonardite humate by weight of the final product, 24.95% monoammonium phosphate by weight of final product, 4% iron oxide ore by weight of the final product, and about 0.1% carbohydrate-containing binding agent by weight of the final product.

20. (Currently Amended) A solid fertilizer composition comprising 70.9% Leonardite humate by weight of the final product, 24.9% monoammonium phosphate by weight of final product, 4% iron oxide ore by weight of the final product, about 0.1% carbohydrate-containing binding agent by weight of the final product, and 0.1% microorganism inoculant by weight of the final product.

21. (Currently Amended) A process for producing a granular fertilizer composition comprising:

- a. admixing a Leonardite comprising a humic acid and a phosphate source, selected from natural rock phosphate, monoammonium phosphate, diammonium phosphate, single superphosphates or triple superphosphates used singularly or in combination, while maintaining the temperature of the mixture below 100 degrees C; and
- b. forming granules from said admixture by pressing said admixture together while maintaining the temperature of the admixture below 100 degrees C.

22. (Original) The process of claim 21, wherein the temperature is held below 80 degrees C.

23. (Original) The process of claim 21, wherein the temperature is held below 65.6 degrees C.

24.-26. (Cancelled)

27. (Currently Amended) A process for producing a granular fertilizer composition comprising:

a. admixing Leonardite comprising at least 1.5% humic acid by weight of final product and a phosphate source while maintaining the temperature of the mixture below 100 degrees C to form an admixture;

b. pressing said admixture together at a pressure between 175.8 and 246.1 kilogram-force per square centimeter while maintaining the temperature of the admixture below 100 degrees C; and

c. breaking the resultant product of step b into granules.

28. (Original) The process of claim 27, further comprising screening said granules of step c to a predetermined size range while maintaining the temperature at less than 80 degrees C.

29. (Currently Amended) The process of claim ~~24, 25, 26~~, 27 or 28, further comprising applying a water repellant coating agent to said granules.

30. (Currently Amended) A process for producing a granular fertilizer composition comprising:

a. admixing Leonardite comprising at least 1.5% humic acid by weight of final product and a phosphate source while maintaining the temperature of the mixture below 80 degrees C to form an admixture;

b. pressing said admixture together at a pressure between 175.8 and 246.1 kilogram-force per square centimeter while maintaining the temperature of the admixture below 80 degrees C; and

c. breaking the resultant product of step b into granules.

31. (Original) The process of claim 30, further comprising screening said granules of step c to a predetermined size range while maintaining the temperature at less than 65.6 degrees C.

32. (Original) The process of claim 30 or 31, further comprising applying a water repellant coating agent to said granules.

33. (Currently Amended) A process for producing a granular fertilizer composition comprising:

a. admixing from 10% to 80% by weight of a phosphate source, Leonardite comprising from 1.5% to 81% humic acid, and the balance selected from the group consisting of binders, inoculants, plant nutrient sources, microorganism nutrient sources, iron, phosphate-solubilizing agents, chelating agents, coating agents and combinations thereof to form an admixture while maintaining the temperature below 100 degrees C; and

b. pressing said admixture together at a pressure between 175.8 and 246.1 kilogram-force per square centimeter while maintaining the temperature of the mixture below 100 degrees C.

34. (Original) The process of claim 33, further comprising breaking the resultant product of step b into granules while maintaining the temperature at less than 100 degrees C.

35. (Original) The process of claim 33 or 34 wherein the temperature is held below 80 degrees C.

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36. (Original) The process of claim 33 or 34 wherein the temperature is held below 65.6 degrees C.

37. (Cancelled)